

SUFFOLK  
COUNTY  
PARKS

THE SUFFOLK COUNTY DEPARTMENT OF  
PARKS, RECREATION & CONSERVATION MANAGES  
~~OVER 748,000 ACRES~~ OF PARKLAND. EACH PARK  
FACILITY PROVIDES A VARIETY OF RECREATIONAL

# DISCOVER YOUR SUFFOLK COUNTY PARKS

**Illustrations by Maria Weisenberg**  
**Park Map by Ann Kirk**

## 1. INTRODUCTION

Welcome to the self-guided nature trail at Cedar Point County Park. As you can see by the map in the middle of the guide, the 1.5 mile long trail runs from the Park Office to an observation platform situated on a bluff overlooking Gardiner's Bay.

You are invited to walk the entire trail, but depending on your interest and stamina (the first half of the trail is somewhat hilly), you may want to veer off on the path that intersects the nature trail after station 4. It will lead you to the main paved road that runs through the Park.



White-breasted  
Nuthatch

The numbered posts along the trail highlight features of interest which correspond to the numbered paragraphs in the guide. Keep in mind that you will likely see many items of interest not covered in the guide. The intent of the guide is to introduce basic elements, principles and processes of the natural environment occurring at Cedar Point County Park.

Please stay on the trail, take only memories of the hike, and leave only footprints behind. Most of all, open your senses and enjoy!

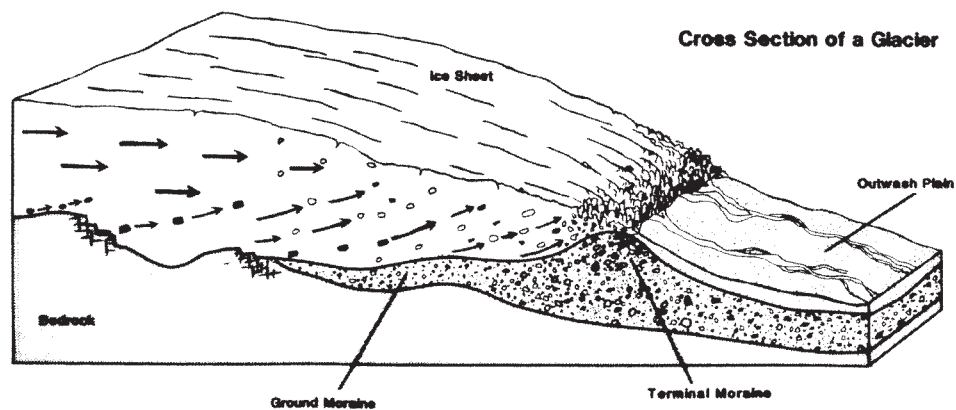
## 2. GEOLOGICAL PRIMER

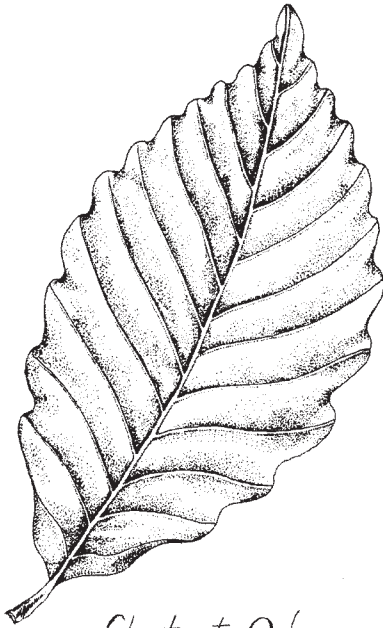
The rocks in front of you are known as glacial erratics and highlight an interesting geological story. About 60,000 years ago, the spot where you are now standing was buried beneath a sheet of ice one mile thick! This ice sheet (or glacier) was the third of four major ice advances that moved southward across the North American continent during the famous "Ice Age" epoch. This epoch was caused by a buildup of snow in the polar regions which compressed into ice and slowly began to move. Acting like a conveyor belt and bulldozer, the glacier scoured the valleys and mountains of New England, carrying large boulders like

those at this station, fragmenting and pulverizing them into gravel, sand, silt and clay through pressure and the effects of freezing and thawing. When the ice sheet reached the present location of the South Fork, it became stationary due to the warming climate which increased the rate of melting to match the rate of advance (see illustration). The result was the creation of a long string of rolling hills parallel to the ice front, known geologically as a terminal moraine. This moraine is known as the Ronkonkoma moraine. It runs west through central Suffolk and Nassau Counties, terminating in western Nassau County; west of this point, it was overridden by a more recent glacial advance. This advance,

ending about 18,000 years ago, formed the Harbor Hill moraine found along the north shore of Long Island, and forms the North Fork and Plum and Block Islands. To better understand the creation of a moraine, you can form your own in a very simple way by moving your hand in sand and stopping. A ridge of sand - a terminal moraine - will form parallel to your palm.

The turquoise colored splotches on the rocks are plants known as lichens. We will talk about them at station 4.





*Chestnut Oak*

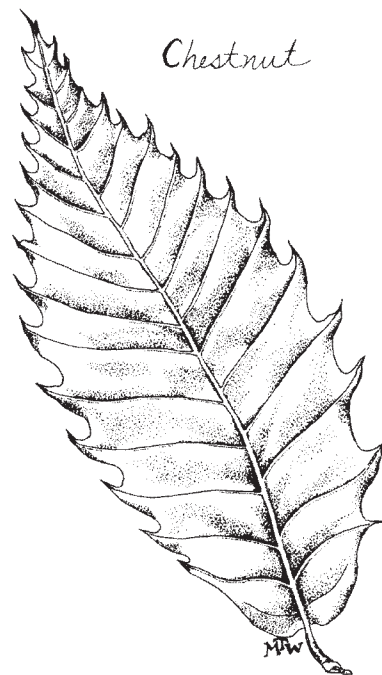
### 3. OAKS, CHESTNUTS AND THE "BLIGHT"

Any guess as to what kind of tree is behind the post? Would it help to know that its fruits are acorns? If you guess an Oak tree, right you are!

There are nearly a dozen species of oaks native to Long Island, including white, black, post and scarlet oaks; and two dwarfed species. Oaks can be told apart from other trees by the shape of their leaves, the texture of their bark and their acorns. Before you is a chestnut oak (*Quercus prinoides*), so named for the similarity of its leaves to that of American chestnut (*Castanea dentata*), once the most abundant tree in these eastern forests (see illustration). The bark of chestnut oak looks like the skin of an alligator.

The American chestnut, prone to the chestnut blight fungus, accidentally entered this country at the turn of the century, has been almost wiped out. Individuals usually don't succumb until they reach 15 or 20 feet in height, but then the bark blisters and splits, and the tree quickly dies. The orange colored blight-causing fungus can often be seen on the bark. Fortunately, scientists are making inroads at developing a blight-resistant strain of the chestnut tree, so perhaps the chestnut will make a comeback in the future.

Chestnut oak is common on Long Island in areas with rocky and gravelly soil.



*Chestnut*

#### 4. THE “LOWER PLANTS”

The turquoise colored mats of plants on the ground in front of you are known as lichens (likens). They display a variety of growth forms, and can be found growing on the ground, trees and shrubs (look for them on the bark of trees lining the walk), on rocks as in station 2, and even on tombstones and buildings. Lichens are actually composed of two plants, an algae and a fungus, that live together in an intimate relationship. The algae, being a green plant, provides food (starch) through photosynthesis to the fungus, and the fungus supplies moisture, minerals, and proteins to the algae. An ecological relationship like this, where both species benefit, is known as symbiosis. There are, of course, many other types of relationships between living things; can you think of any? Some relationships can be harmful, such as parasitism.

Lichens are good indicators of air quality as they cannot tolerate sulphur dioxide and heavy metals, two common air contaminants. In Manhattan's Central Park, for example, only a handful of species occur on rock outcroppings, while over 150 species are known from eastern Long Island.

On the ground around the lichens are emerald green clumps of mosses. Mosses have no vascular or supporting tissue, so they rarely grow more than an inch or two high. Look carefully at a few of the mosses. Do any have wispy stalks sticking up above the green leaves? These stalks are the reproductive part of the plant, and at the tip is a tiny capsule that holds spores. The spores are released and when they land in suitable habitat, grow into a new moss plant.

While lichens and mosses are sometimes called “lower plants” because of their primitive, less complex structures, they are, nevertheless, fascinating and surprisingly complex. Other interesting lower plants include hornworts, liverworts, mushrooms and slime molds.

You can continue on the nature walk by bearing to your right or go on the path straight ahead which will lead you to the paved road that runs through the Park.

## 5. STRUCTURAL PARTS

Looking down the slope, you can see that this forest, like all forests, has a distinctive structure made up of specific layers or stories, with each story having its own association of plants and animals.

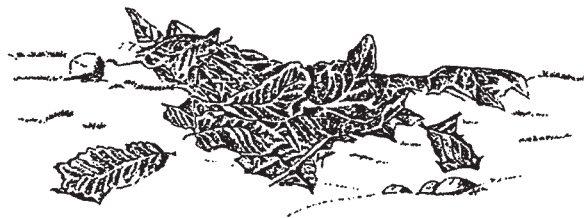
The uppermost layer is known as the tree canopy. This layer may intercept up to 95% of the sunlight falling on the forest. Many animals live in the tree canopy, including squirrels, many bird species, and a host of aerial insects. The tree canopy at Cedar Point County Park is dominated by oaks. Underneath the oaks are several understories (or second layers). In the taller of these two, we find small trees such as flowering dogwood and sassafras, while in the lower understory, are shrubs such as huckleberry and blueberry.

Below this story, we have the ground layer, which contains wildflowers, mosses and lichens. Here too is found a distinctive association of animals.

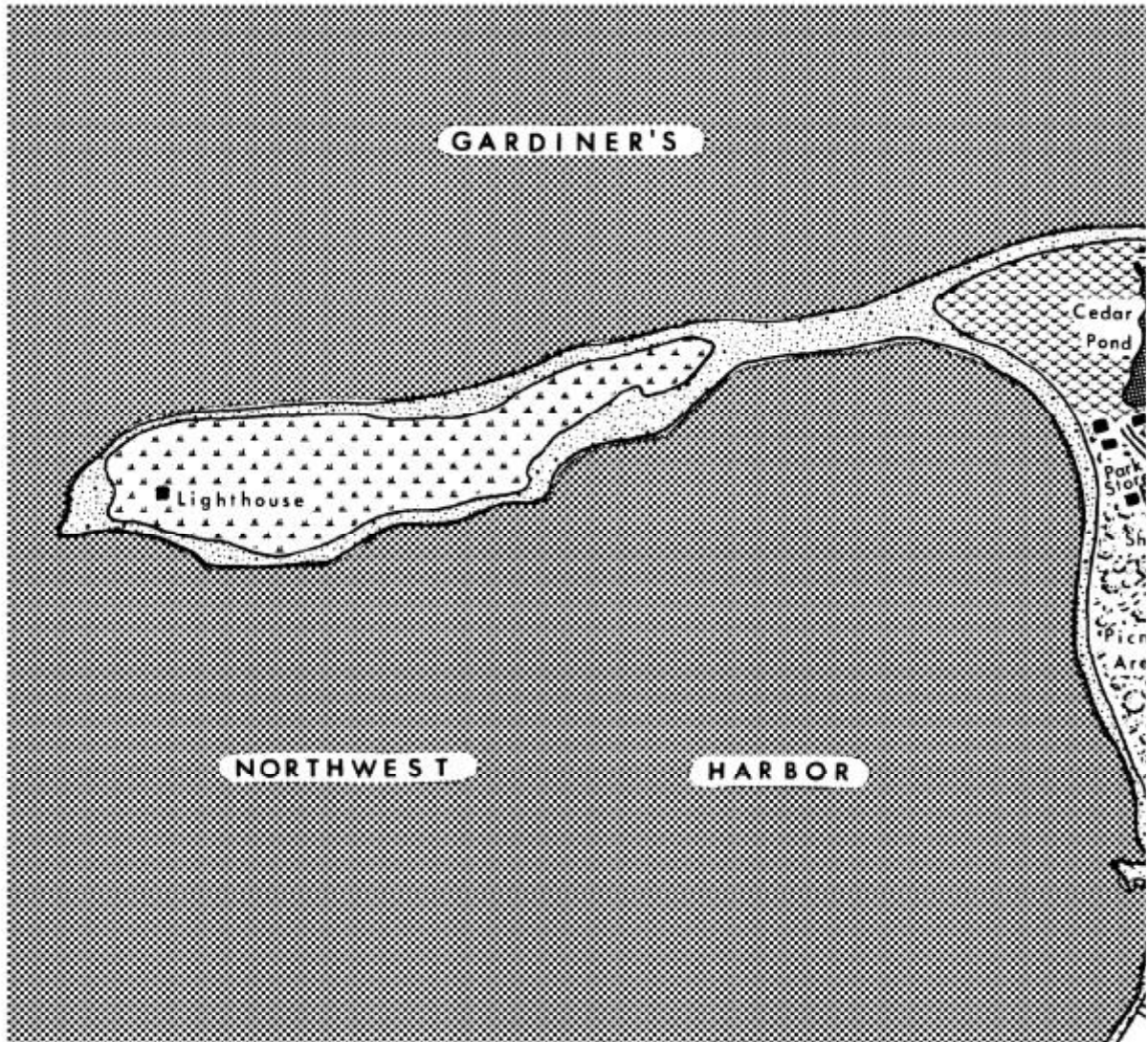
The type of animals found in these stories is not the only difference between them. Scientists have learned that the quality and intensity of sunlight changes as it moves downward through the forest canopy, so that not only do understory plants receive less light, they have to adapt to light of a different quality!

## 6. RECYCLING

Take a look around you. Do you notice the downed wood? Many people might think this wood should be harvested as firewood because it's not serving any purpose by being allowed to decay. Yet this is not true since decaying logs and leaves provide the essential fuel that runs the forest. As these materials break down, they release stored minerals and nutrients which are quickly taken up by living plants rooted in the soil. Scoop up some of the organic matter from the leaf litter and you can see the decaying material. This organic matter is called humus. Leaves, twigs, flowers and seeds can be seen on top; the deeper you scoop, the more broken down the material becomes. A large number of organisms live in humus, such as moles, earthworms, insects, fungi and slime molds all helping to break it down. Downed logs also provide suitable habitat for a number of animals including salamanders, snakes, mice, chipmunks and raccoons. So, if too many logs are taken from a forest, it can slowly starve, and the life cycles of these organisms will be disrupted.



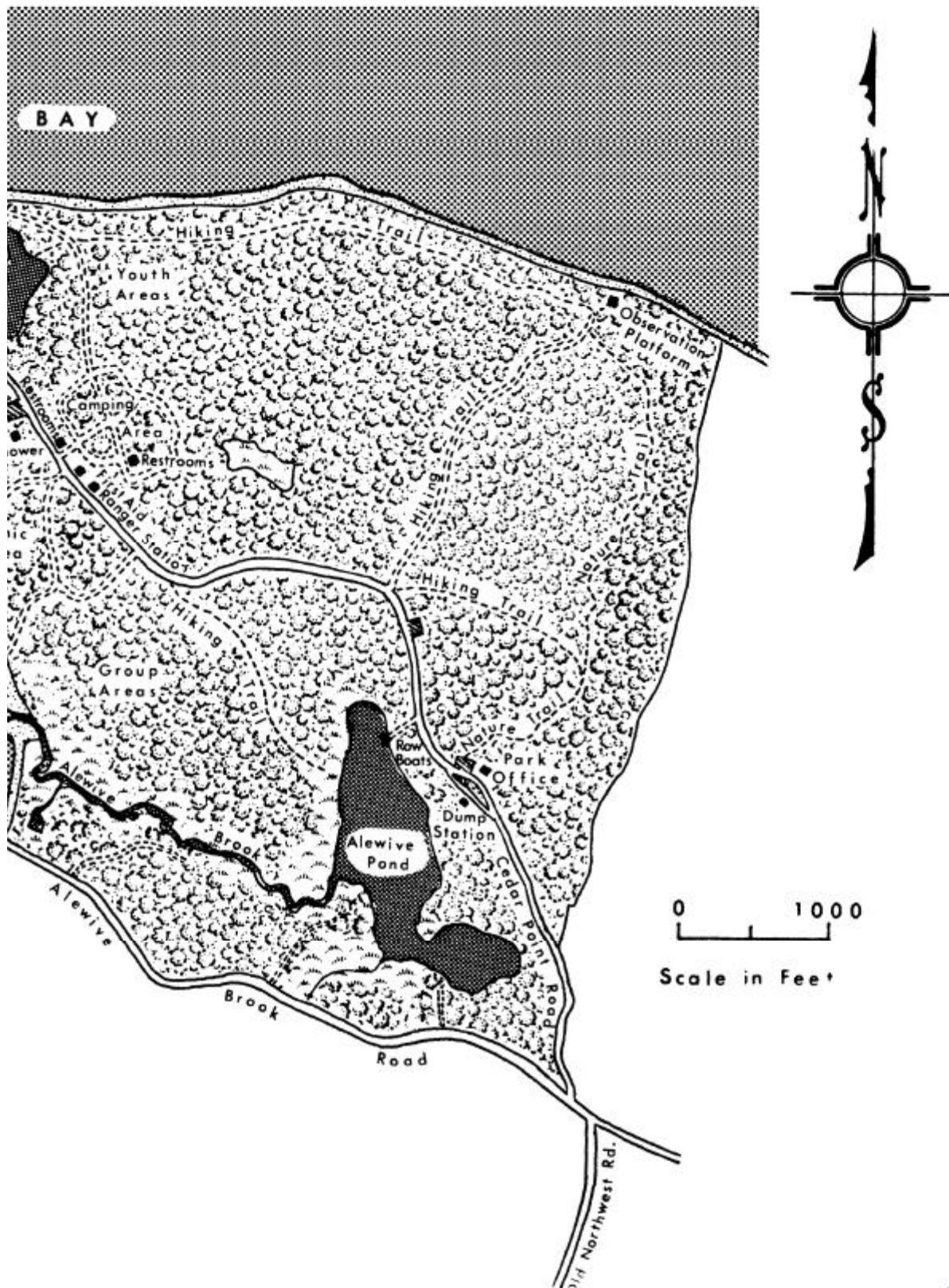
# CEDAR POINT



## LEGEND

	Improved Road		Beach
	Woods Road		Deciduous Forest (Oak)
	Trail		Wetland Vegetation
	Structure		Beach Grass
	Parking		Shrubs (Beach Plum, Bayberry)
	Water		

# COUNTY PARK



## 7. ANIMALS, ANIMALS, ANIMALS

Look carefully at this red cedar tree. Do you notice anything different about it? Notice that the stubby lower branches stand out from the longer branches above. How would you explain this difference? The branches are the result of browsing by white-tail deer, the largest mammal on Long Island, and a common animal at Cedar Point County Park. They are fond of red cedar.

The browsed tree is one sign of many along the trail which provides evidence of animals. Can you think of other animal signs you might look for on your walk? Make a note to look for nests of various birds and squirrels, food remains (like partially eaten acorns), scat or animal waste products, footprints, and pieces of fur or feathers. You might also see mole tunnels and smell the musky scent of fox!

## 8. THE PILGRIM SHRUB

The small woody shrub next to the post had great importance to American colonists. They used the wax-coated berries in

seasoning and for making wax candles. The aromatic leaves were used as a sachet.

Bayberry, so named because it is common to abundant along the coast is widespread on L.I., preferring sandy soils. As these individuals here indicate, it will occasionally grow in sites with richer soil. Its close cousin, Sweet Gale, is common in wetlands.

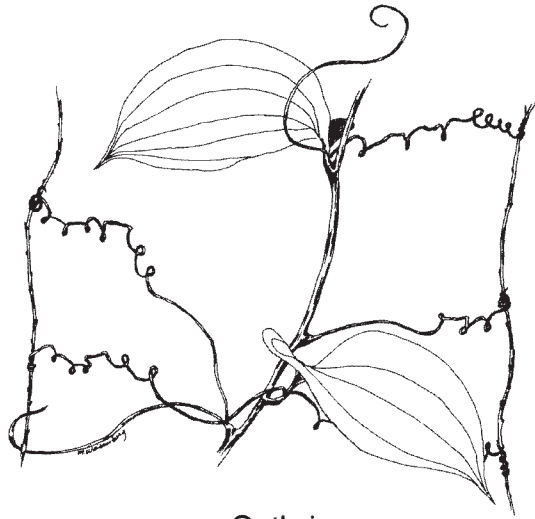
The waxy fruits from a staple part of the winter diet of the yellow-rumped warbler (Myrtle warbler).

## 9. CONTEMPLATION

No interpretation here! Instead, it is a stop for you to expand your senses. Take two minutes and listen to the natural sounds around you. How many different birds can you hear calling? What about noises like the breeze and wind blowing through the trees? Any scents worth noting? Notice the different colors and textures of the items you have been seeing along the walk? What's the point of it all? - to realize that when we open ourselves to the world around us, we are surrounded by a tremendous amount of natural beauty, complexity and variety!

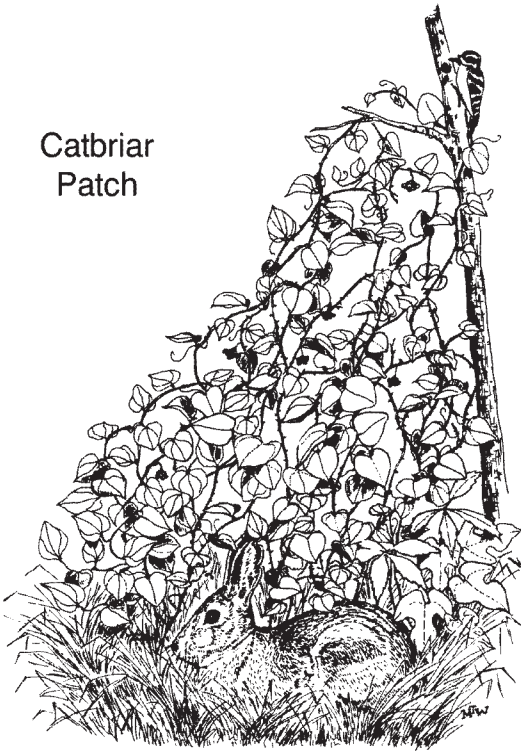
## 10. THE BRIAR PATCH

Do you remember when Peter Rabbit missed his dinner because he couldn't get out of the briar patch? Well, like so many fairy tales, it's partially based on truth! Thickets of catbriar are used extensively by cottontail rabbits because they provide protection against predators, particularly hawks and owls, and the rabbits like to feed on briar vines (see illustration).



Catbriar

Catbriar  
Patch



Take a closer look at one of the vines - do you notice the curly projections that reach around other plants and briars? They are known as tendrils (modified leaves), which help anchor the green briar vine as it grows (see illustration). Tendrils are an adaptation shared by many viny plants. No wonder it is so hard to walk through a briar patch!

Birds such as cardinals, robins and catbirds like to nest in briar thickets.

## 11. ONE TREE

There are about 88 different tree species native to Long Island. Some of these, like oak and hickory can grow quite tall, while others are much shorter. The following three stations illustrate a few of these shorter understory species. The tree with the olive green branches is sassafras (*Sassafras albidum*). Glance at a dozen or so of its leaves. Do you notice anything unusual? The tree has leaves with three distinct shapes - an oval leaf (sock), a leaf with a single lobe (mitten), and a leaf with a double lobe (glove) (see illustration). The roots of the sassafras can be made into a tea which tastes similar to root beer. Colonists, thinking the roots cured disease, shipped large quantities to Europe. Studies suggest that as the tree gets older, oval leaves become more common. Sassafras is a member of a family that has many tropical species.

Sassafras



## 12. ANOTHER TREE

Plants are often called many different common names (hence the reason why botanists use scientific names to avoid confusion). The tree in front of you, with the smooth grey bark, has several names including serviceberry, sarviceberry, shadbush or shadblow (*Amelanchier* spp.). These last two names are especially interesting. The shad is a fish that belongs to the herring family. It lives in the sea, but spawns in fresh and brackish water ponds on Long Island. The shad move upwater to spawn in the spring. Shadbush, which often grows along these streams, blooms at the same time the shad moves upstream to spawn; early settlers noted this and began to associate the two events - the spawning of the shad with the blooming of the bush.

### 13. YET ANOTHER TREE

Widely planted as an ornamental because of its colorful blossoms (see illustration), the flowering dogwood (*Cornus florida*) is one of the most attractive woodland trees found on Long Island, and it brings up an interesting question of how the dogwood got its common name. People use the term dogwood and likely don't realize how the term came to be. The most commonly told story relates to an old English verb, "dag," which means to pierce or stab as with a dagger. Dogwood is believed to have originated from dagwood or dagger - relating to the use of the tree in making primitive spears and daggers. Somewhere in the past, dagwood became dogwood. There are hundreds of other interesting anecdotes of how plants received their common and scientific names. It's up to you to learn about them!

### 14. OBSERVATION AREA

Welcome to the observation area! From your high vantage point, you have a commanding view of Gardiner's Bay and many of the land features of eastern Long Island. Directly in front of you is Gardiner's Island, six miles distant, and can be seen at about 1 o'clock. It is a wonderful 3450 acre island that has been owned by one family for many generations. Being so isolated, it is a haven for many types of wildlife.

At about 11:00 o'clock, and 7.5 miles away, we see Plum Island, an extension of the North Fork. Here the U.S. Department of Agriculture has an animal disease laboratory. Beyond Plum Island, some 15 miles distant, is the shoreline of Connecticut.



Flowering  
Dogwood

At about 10 o'clock, is Orient, 6.5 miles away, the easternmost tip of the Fork. The rather long sandspit trailing west from the point is Orient Point State Park. Around the bank of the bluff (at about 9 o'clock), is Shelter Island, a famous summer resort. The southeastern third of this 7000 acre island has been protected as a wildlife preserve through the efforts of the Nature Conservancy.

The bluff at Cedar Point County Park is naturally receding due to the forces of waves, wind and rain. Due to these actions the bluffs along the north shore of the South Fork and the north shore of Long Island are moving back from several inches to several feet annually. This rate of erosion can be accelerated by foot traffic on or near the bluff so please restrict your movement to the platform.

This station ends your interpretive nature walk. From here, you can either walk back along the nature trail just taken or, more preferably, along the trail parallel to the bluff. Along the way, look for other interesting objects, but please don't walk out to the bluff. This will accelerate erosion of the cliff and we don't want the sea to claim the Park anytime soon!

The bluff trail will eventually intersect with the main road that runs through the campground and down to the beach. At this intersection, you can either turn left to the campground, go straight to a little salt pond, or turn right and head out to the sandspit where, at its end is situated the Cedar Point Lighthouse.





